

Attorney Docket No.: PTQ-0058
Inventors: Van Eyk et al.
Serial No.: 10/824,027
Filing Date: April 14, 2004
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This listing of the claims will replace all prior versions and listings of claims in the application:

Listing of the claims:

Claim 1-15: (canceled)

Claim 16: (currently amended) ~~The method of claim 1~~ A method for identifying an agent capable of priming a cell for preconditioning and/or inducing preconditioning of a cell, tissue or organ comprising assessing the ability of the agent to increase abundance of a preconditioning protein in a cell, tissue or organ by detecting an increase in abundance of the preconditioning protein in the presence of the agent as compared to the abundance of preconditioning protein in the absence of the agent, wherein the agent identified increases the abundance of one or more preconditioning proteins selected from the group consisting of isocitrate dehydrogenase NAD⁺ specific subunit alpha, succinyl CoA ligase, a 23 kDa mitochondrial precursor subunit of Complex I, a 24 kDa mitochondrial precursor subunit of Complex I, a 30 kDa mitochondrial precursor subunit of Complex I, a δ chain mitochondrial precursor of the F₁ portion of Complex V, a d chain mitochondrial

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precursor of a the F₀ portion of Complex V, prohibitin, ADP ribosyl hydrolase, HSP27 and RNA binding protein regulatory subunit (DJ-1).

Claim 17: (currently amended) ~~The method of claim 1~~ A method for identifying an agent capable of priming a cell for preconditioning and/or inducing preconditioning of a cell, tissue or organ comprising assessing the ability of the agent to decrease abundance of a preconditioning protein in a cell, tissue or organ by detecting a decrease in abundance of the preconditioning protein in the presence of the agent as compared to the abundance of preconditioning protein in the absence of the agent, wherein the agent identified decreases the abundance of one or more preconditioning proteins selected from the group consisting of dihydrolipoamide succinyltransferase, core protein I of Complex III, metaxin 2 and sarcalumenin.

Claim 18: (currently amended) ~~The method of claim 1~~ A method for identifying an agent capable of priming a cell for preconditioning and/or inducing preconditioning of a cell, tissue or organ comprising assessing the ability of the agent to change abundance of a preconditioning protein

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in a cell, tissue or organ by detecting a change in
abundance of the preconditioning protein in the presence of
the agent as compared to the abundance of preconditioning
protein in the absence of the agent, wherein the agent
identified changes the abundance of ~~DDAH~~ the preconditioning
protein NG-dimethylarginine dimethylaminohydrolase (DDAH).

Claim 19: (currently amended)) ~~The method of claim 1~~
~~wherein the agent identified increases~~ A method for
identifying an agent capable of priming a cell for
preconditioning and/or inducing preconditioning of a cell,
tissue or organ comprising assessing the ability of the
agent to increase post-translational modification of β chain
mitochondrial precursor of the F_1 portion of Complex V, or
protein X, ~~or aconitate hydratase (aconitase)~~ in a cell,
tissue or organ by detecting an increase in post-
translational modification of β chain mitochondrial
precursor of the F_1 portion of Complex V or protein X in the
presence of the agent as compared to the post-translational
modification of β chain mitochondrial precursor of the F_1
portion of Complex V or protein X in the absence of the
agent.

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Claim 20 (canceled)

Claim 21 (new): The method of claim 16 wherein the preconditioning protein is isocitrate dehydrogenase NAD⁺ specific subunit alpha.

Claim 22 (new): The method of claim 16 wherein the preconditioning protein is succinyl CoA ligase.

Claim 23 (new): The method of claim 16 wherein the preconditioning protein is the 23 kDa mitochondrial precursor subunit of Complex I.

Claim 24 (new): The method of claim 16 wherein the preconditioning protein is the 24 kDa mitochondrial precursor subunit of Complex I.

Claim 25 (new): The method of claim 16 wherein the preconditioning protein is the 30 kDa mitochondrial precursor subunit of Complex I.

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Claim 26 (new): The method of claim 16 wherein the preconditioning protein is the δ chain mitochondrial precursor of the F_1 portion of Complex V.

Claim 27 (new): The method of claim 16 wherein the preconditioning protein is the d chain mitochondrial precursor of the F_0 portion of Complex V.

Claim 28 (new): The method of claim 16 wherein the preconditioning protein is prohibitin.

Claim 29 (new): The method of claim 16 wherein the preconditioning protein is ADP ribosyl hydrolase.

Claim 30 (new): The method of claim 16 wherein the preconditioning protein is HSP27.

Claim 31 (new): The method of claim 16 wherein the preconditioning protein is RNA binding protein regulatory subunit (DJ-1).

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Claim 32 (new): The method of claim 17 wherein the preconditioning protein is dihydrolipoamide succinyltransferase.

Claim 33 (new): The method of claim 17 wherein the preconditioning protein is core protein I of Complex III.

Claim 34 (new): The method of claim 17 wherein the preconditioning protein is metaxin 2.

Claim 35 (new): The method of claim 17 wherein the preconditioning protein is sarcalumenin.

Claim 36 (new): The method of claim 19 wherein the agent increases post-translational modification of β chain mitochondrial precursor of the F_1 portion of Complex V.

Claim 37 (new): The method of claim 19 wherein the agent increases post-translational modification of protein X.